



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/737,281

12/16/2003

Gaohong Wei

VRT0112US

6590

60429

7590

11/24/2006

CSA LLP

4807 SPICEWOOD SPRINGS RD.

BLDG. 4, SUITE 201

AUSTIN, TX 78759

EXAMINER

PHAM, MICHAEL

ART UNIT

PAPER NUMBER

2167

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/737,281

Applicant(s)

WEI ET AL.

Examiner

Michael D. Pham

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**Detailed Action**

**Specification**

1. Prior objections to specifications are withdrawn.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 23-27 are rejected under 35 U.S.C. 101 are maintained for the following reasons set forth below:

MPEP 2106

**Computer-Related Processes Limited to a Practical Application in the Technological Arts**

There is always some form of physical transformation within a computer because a computer acts on signals and transforms them during its operation and changes the state of its components during the execution of a process. **Even though such a physical transformation occurs within a computer, such activity is not determinative of whether the process is statutory because such transformation alone does not distinguish a statutory computer process from a nonstatutory computer process.** What is determinative is not how the computer performs the process, but what the computer does to achieve a practical application. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036.

That is, a claim to a proper computer readable medium (e.g. not a signal or program listing on paper) encoded with functional descriptive material that can function with a computer to effect a useful, concrete and tangible result (e.g. running an assembly line or executing a stock transaction) satisfies the practical application test. Note that the specification may provide

Art Unit: 2167

evidence as to what Applicant intends to be included within the metes and bounds of the claimed medium. However, if there is evidence the medium is intended to cover embodiments which are non-statutory, i.e., the medium is not limited to those media which fall within a statutory category of invention and enable the functionality of what's stored thereon to be realized, the claim must be rejected. Applicant's specifications paragraph 0044 discloses that machine readable medium includes communications media conveying signals encoding instructions. Examiner suggests either to remove the above from paragraph 0044 or to limit the claim to a machine-readable storage medium.

4. Prior rejections under 35 U.S.C. 101 towards claims 13-22 are withdrawn.
5. Prior rejection under 35 U.S.C. 101 towards claims 28 and 30-31 are withdrawn.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2167

7. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application publication 2004/0010487 by Prahlad et. al. (hereafter Prahlad).

**Claim 1:**

Prahlid discloses:

a method comprising:

**Discovering a plurality of components of a database** [0062, it states the application makes appropriate entries into the snapshot table (e.g. database) for the given client. That when a backup is being performed, the application identifies (e.g. discovers) the content (e.g. component), identifies the volumes involved (e.g. component), identifies the applications involved (e.g. component), engages all the writers involved, and performs or directs the snapshot and performs or directs the copying to the quick recovery volume. Then stating that the appropriate entries (components) are made into the snapshot table (database) for the given client and volumes involved];

**Selecting a component of said plurality of components** [0019, selects a volume.];

**Selecting a data management resource of a plurality of data management resources**

**Using an attribute of said component** [0037, Once the volume is selected it is removed from the pool of available volumes (plurality of data management resources). This may be accomplished, for example, by determining the capacity needed for a quick recovery volume, determining the capacity of the available volumes (e.g. characteristics of the available volumes, hence attributes of said components), and selecting the volume (selecting data management resource) based on capacity of identified volumes.]; and

**Generating a point-in-time image of said component using said data management resource** [0066, interface for users to browse and recover data such as from snapshot images, quick recovery volumes, primary copies, back up copies, etc., as of a point-in-time].

**Claim 2:**

Prahlid discloses:

the method of claim 1, wherein said discovering comprises:

**Determining a structure of said database** [0042, tracking data changes in volume.

That is, it must determine changes of the structure]; and

**Identifying each of said plurality of component using said data management resource** [0042, The quick recovery volume may then be incrementally updated in accordance with the data changes or with reference to the tracked changes in the snap shot images. There must be identification of volume in order to reference the tracked changes in the snapshot images.]

**Claim 3:**

Prahlid discloses:

the method of claim 2, wherein said selecting a component of said plurality of components comprises:

**Selecting said component of said plurality of components to include within a point-in-time image of said database** [0037, the destination volume for the quick recovery volume may be specified to be copied to specific volumes or may be selected automatically from a pool

Art Unit: 2167

of available volumes. 0042, quick recovery volume is created by capturing a snapshot image of the primary data set and creating the quick recovery volume from data stored on the primary volume. 0067, users may specify a point in time for browsing and restoration to occur. If the application does not find a snapshot, back copies, such as primary copies and secondary copies, and quick recovery volumes are presented or accessed for data recovery or restoration.].

**Claim 4:**

Pahlid discloses:

**the method of claim 2, wherein said selecting a component of said plurality of components comprises:**

**Selecting at least one of a database directory, table space container, and a redo log directory** [0066, volumes in a directory. That is, selection of component (volume) is selected from a directory.].

**Claim 5:**

Pahlid discloses:

**the method of claim 2, wherein said selecting a data management resource of a plurality of data management resources comprises:**

**Selecting said data management resource using said attribute of said component a user-defined policy** [0036, A sub-client generally refers to a defined set of parameters and policies that define the scope of the data set, such as the volumes or applications that are going to

Art Unit: 2167

be copied, recovered, or otherwise managed. That is selecting a data management resource (can be an application) using attribute and user-defined policy (parameters and policies).].

**Claim 6:**

Prahlid discloses:

**the method of claim 2, wherein said selecting a data management resource of a plurality of data management resources comprises:**

**Selecting said data management resource using at least one of a size attribute, a type attribute, a structure attribute, and a location attribute [0037, media agent targeting a volume according to the storage space available on a particular volume in comparison to the space needed for the quick recovery volume. That is size attribute used for media agent.]**

**Claim 7:**

Prahlid discloses:

**the method of claim 6, wherein said selecting said data management resource of a plurality of data management resources further comprises:**

**Defining a component size range [0037, media agent targeting a volume according to the storage space available on a particular volume in comparison to the space needed for the quick recovery volume.]; and**

**Selecting said data management resource in response to a determination that said size attribute is within said component size range [0038-0039, media agent may interface with other agents after determination that said size of attribute is within said component size range.]**



**Claim 8:**

Prahlid discloses:

**the method of claim 2, wherein said selecting a data management resource of a plurality of data management resources comprises:**

**Selecting a point-in-time image creation process [0067, user is able to specify point in time image. If snapshot is unavailable creation of the point in time image is created for specified point in time.].**

**Claim 9:**

Prahlid discloses:

**the method of claim 8, wherein said point-in-time image creation process comprises at least one of: a file-level point-in-time image creation process, a directory-level point-in-time image creation process, a file system-level point-in-time image creation process, a storage device-level point-in-time image creation process, a volume-level point-in-time image creation process, and a volume group-level point-in-time image creation process [0066, volume level point in time recovery].**

**Claim 10:**

Prahlid discloses:

**the method of claim 8, wherein said selecting a point-in-time image creation process comprises:**

**Selecting at least one of: a snapshot creation process, a storage checkpoint creation process, and a file copy command, and a backup utility process [Abstract, snapshot image generated].**

**Claim 11:**

Prahlid discloses:

**the method of claim 2, further comprising:**

**Restoring said database using said point-in-time image of said component [0067,**  
Snapshot data found to be available as of the point-in-time the user specified is displayed to the user. Snapshot data is displayed if it exists and qualifies as valid data as of the point-in-time. If the browser application does not find a snapshot, backup copies, such as primary copies, and secondary copies, and quick recovery volumes are presented or accessed for data recovery or restoration.].

**Claim 12:**

Prahlid discloses:

**the method of claim 11, wherein,**

**Said database is initially stored within a first storage region[primary dataset is stored on primary disk, primary data volume], and**

**Said restoring comprises,**

**Restoring said database to a second storage region [0069, restoring data can be restored and moved to a different disk by using a data mover.].**

**Claim 13:**

Prahlid discloses:

**an apparatus comprising:**

**Means for discovering a plurality of components of a database** [0062, it states the application makes appropriate entries into the snapshot table (e.g. database) for the given client. That when a backup is being performed, the application identifies (e.g. discovers) the content (e.g. component), identifies the volumes involved (e.g. component), identifies the applications involved (e.g. component), engages all the writers involved, and performs or directs the snapshot and performs or directs the copying to the quick recovery volume. Then stating that the appropriate entries (components) are made into the snapshot table (database) for the given client and volumes involved];

**Means for associating a data management resource with a component of said plurality of components** [0037, Once the volume is selected it is removed from the pool of available volumes (plurality of data management resources). This may be accomplished, for example, by determining the capacity needed for a quick recovery volume, determining the capacity of the available volumes (e.g. characteristics of the available volumes, hence attributes of said components), and selecting the volume (selecting data management resource) based on capacity of identified volumes.]; **and**

**Means for generating a point-in-time image of said component using said data management resource** [0066, interface for users to browse and recover data such as from

Art Unit: 2167

snapshot images, quick recovery volumes, primary copies, back up copies, etc., as of a point-in-time].

**Claim 14:**

Prahlid discloses:

**the apparatus of claim 13, wherein said means for discovering comprises:**

**Means for determining a structure of said database** [0042, tracking data changes in volume. That is, it must determine changes of the structure]; and

**Means for identifying each of said plurality of components using said structure** [0042, The quick recovery volume may then be incrementally updated in accordance with the data changes or with reference to the tracked changes in the snap shot images. There must be identification of volume in order to reference the tracked changes in the snapshot images.].

**Claim 15:**

Prahlid discloses:

**the apparatus of claim 14, wherein said means for associating comprises:**

**Means for associating a point-in-time image creation process with said component of said plurality of components** [0019, select a destination volume for the quick recovery volume of the primary data set from a pool of available volumes].

**Claim 16:**

Prahlid discloses:

**the apparatus of claim 14, wherein said means for associating comprises:**

**Means for associating said data management resource with said component of said plurality of components using an attribute of said component** [0034, client computer includes a plurality of applications and a file system or systems for which a quick recovery volume may be created. 0036, a sub-client generally refers to a defined set of parameters and policies that define the scope of the data set, such as the volumes or applications. 0045, The features and attributes of files may vary according to the particular file system in use. The database management systems may use these special file system features. That is database management resources (i.e. agents, file system features, and the like) is selected using an attribute of said component [ i.e. feature and attributes for file system features and agents with parameters and policies defined.]].

**Claim 17:**

Prahlid discloses:

**the apparatus of claim 16, wherein said means for associating further comprises:**

**Means for associating said data management resource with said component of said plurality of components using a user-defined policy** [0036, A sub-client generally refers to a defined set of parameters and policies that define the scope of the data set, such as the volumes or applications that are going to be copied, recovered, or otherwise managed. That is selecting a data management resource (can be an application) using attribute and user-defined policy (parameters and policies).].

**Claim 18:**

Prahlid discloses:

**the apparatus of claim 16, wherein said means for associating said data management resource with said component of said plurality of components using an attribute of said component comprises:**

**Means for associating said data management resource with said component of said plurality of components using at least one of a size attribute, a type attribute, a structure attribute, and a location attribute** [0037, media agent targeting a volume according to the storage space available on a particular volume in comparison to the space needed for the quick recovery volume. That is size attribute used for media agent.].

**Claim 19:**

Prahlid discloses:

**the apparatus of claim 18, wherein said means for associating said data management resource with said component of said plurality of components using an attribute of said component further comprises:**

**Means for defining a component size range**[0037, media agent targeting a volume according to the storage space available on a particular volume in comparison to the space needed for the quick recovery volume.]; and

**Means for associating said data management resource with said component in response to a determination that said attribute is within said component size range** [0038-

0039, media agent may interface with other agents after determination that said size of attribute is within said component size range.].

**Claim 20:**

Prahlid discloses:

**the apparatus of claim 14, wherein said means for generating comprises:**

**Means for generating a point-in-time image of said database** [0067, user is able to specify point in time image. If snapshot is unavailable creation of the point in time image is created for specified point in time.].

**Claim 21:**

Prahlid discloses:

**the apparatus of claim 14, further comprising:**

**Means for restoring said database using said point-in-time image of said component** [0067, Snapshot data found to be available as of the point-in-time the user specified is displayed to the user. Snapshot data is displayed if it exists and qualifies as valid data as of the point-in-time. If the browser application does not find a snapshot, backup copies, such as primary copies, and secondary copies, and quick recovery volumes are presented or accessed for data recovery or restoration.].

**Claim 22:**

Prahlid discloses:

**the apparatus of claim 21, wherein,**

**Said database is initially stored within a first storage region [0038, primary dataset is stored on primary disk, primary data volume], and**

**Said means for restoring comprises,**

**Means for restoring said database to a second storage region [0069, restoring data can be restored and moved to a different disk by using a data mover.].**

**Claim 23:**

Prahlid discloses:

**a program product comprising:**

**A machine-readable medium having a plurality of instructions executable by a machine embodied therein, wherein said plurality of instructions when executed cause said machine to:**

**Discovering a plurality of components of a database [0062, it states the application makes appropriate entries into the snapshot table (e.g. database) for the given client. That when a backup is being performed, the application identifies (e.g. discovers) the content (e.g. component), identifies the volumes involved (e.g. component), identifies the applications involved (e.g. component), engages all the writers involved, and performs or directs the snapshot and performs or directs the copying to the quick recovery volume. Then stating that the appropriate entries (components) are made into the snapshot table (database) for the given client and volumes involved];**

**Selecting a component of said plurality of components [0019, selects a volume.];**



**Selecting a data management resource of a plurality of data management resources**

**Using an attribute of said component** [0037, Once the volume is selected it is removed from the pool of available volumes (plurality of data management resources). This may be accomplished, for example, by determining the capacity needed for a quick recovery volume, determining the capacity of the available volumes (e.g. characteristics of available volumes, hence attributes of said components), and selecting the volume (selecting data management resource) based on capacity of identified volumes.]; and

**Generate a point-in-time image of said component using said data management resource** [0066, interface for users to browse and recover data such as from snapshot images, quick recovery volumes, primary copies, back up copies, etc., as of a point-in-time].

**Claim 24:**

Prahlid discloses:

**the program product of claim 23, wherein discovering comprises:**

**Determining a structure of said database**[0042, tracking data changes in volume. That is, it must determine changes of the structure]; and

**Identifying each of said plurality of components using said structure** [0042, The quick recovery volume may then be incrementally updated in accordance with the data changes or with reference to the tracked changes in the snap shot images. There must be identification of volume in order to reference the tracked changes in the snapshot images.].

**Claim 25:**

Art Unit: 2167

Prahlid discloses:

**the program product of claim 24 wherein selecting a component of said plurality of components comprises:**

**Selecting said component of said plurality of components to include within a point-in-time image of said database** [0037, the destination volume for the quick recovery volume may be specified to be copied to specific volumes or may be selected automatically from a pool of available volumes. 0042, quick recovery volume is created by capturing a snapshot image of the primary data set and creating the quick recovery volume from data stored on the primary volume. 0067, users may specify a point in time for browsing and restoration to occur. If the application does not find a snapshot, back copies, such as primary copies and secondary copies, and quick recovery volumes are presented or accessed for data recovery or restoration.].

**Claim 26:**

Prahlid discloses:

**the program product of claim 24, wherein selecting a data management resource of a plurality of data management resources comprises:**

**Selecting said data management resource using said attribute of said component and a user-defined policy** [0036, A sub-client generally refers to a defined set of parameters and policies that define the scope of the data set, such as the volumes or applications that are going to be copied, recovered, or otherwise managed. That is selecting a data management resource (can be an application) using attribute and user-defined policy (parameters and policies).].

**Claim 27:**

Prahlid discloses:

**the program product of claim 24, wherein selecting a data management resource of a plurality of data management resource of a plurality of data management resources comprises:**

**Selecting a point in time image creation process** [0067, user is able to specify point in time image. If snapshot is unavailable creation of the point in time image is created for specified point in time.].

**Claim 28:**

Prahlid discloses:

**a system comprising:**

**A first storage element to store a database** [0045-0046, database management system comprising a storage unit. 0038, primary volumes and the quick recovery volumes may be stored via a variety of storage devices.]; **and**

**A point-in-time image utility configured to,**

**Access said first storage device** [0039, snapshot image of the primary data set is accessed to create a quick recovery volume of the primary data set.];

**Discovering a plurality of components of a database** [0062, it states the application makes appropriate entries into the snapshot table (e.g. database) for the given client. That when a backup is being performed, the application identifies (e.g. discovers) the content (e.g. component), identifies the volumes involved (e.g. component), identifies the applications

Art Unit: 2167

involved (e.g. component), engages all the writers involved, and performs or directs the snapshot and performs or directs the copying to the quick recovery volume. Then stating that the appropriate entries (components) are made into the snapshot table (database) for the given client and volumes involved];

**Selecting a component of said plurality of components** [0019, selects a volume.];

**Selecting a data management resource of a plurality of data management resources**

**Using an attribute of said component** [0037, Once the volume is selected it is removed from the pool of available volumes (plurality of data management resources). This may be accomplished, for example, by determining the capacity needed for a quick recovery volume, determining the capacity of the available volumes (e.g. characteristics of available volumes, hence attributes of said components), and selecting the volume (selecting data management resource) based on capacity of identified volumes.]; and

**Generate a point-in-time image of said component using said data management resource** [0066, interface for users to browse and recover data such as from snapshot images, quick recovery volumes, primary copies, back up copies, etc., as of a point-in-time].

**Claim 29:**

Prahlid discloses:

the system of claim 28, wherein said point-in-time image utility comprises:

**A memory to store said point-in-time image utility** [Prahlad discloses a point-in-time snapshot application run on a computer, Abstract and 0067]; **and**

Art Unit: 2167

**A processor coupled to said memory to execute said point-in-time image utility**

[Prahlad discloses a point-in-time snapshot application run on a computer, (Abstract and 0067)].

**Claim 30:**

Prahlid discloses:

**the system of claim 28, further comprising a first node, wherein said first node comprises said first storage element and said point-in-time image utility**[0067, primary dataset is stored on primary disk, primary data volume].

**Claim 31:**

Prahlid discloses:

**the system of claim 30, further comprising a second node communicatively coupled to said first node, wherein said second node comprises a second storage element to store said point-in-time image of said component** [0069, restoring data can be restored and moved to a second storage region by using a data mover.].

***Response to Arguments***

8. Applicant's arguments filed 9/7/2006 have been fully considered but they are not persuasive.

As to the main assertion, Applicant's assert that the cited reference does not teach or suggest "discovering a plurality of components of a database". Asserting that although "sophisticated software such as database management systems may use special file system features or even raw

Art Unit: 2167

logical volumes, and employ measure to protect the consistency of data and metadata”; this simply states that a DBMS can make use of a raw logical volume. Further providing an analogy stating that a car can use a road would not teach or suggest that a road is a component of a car. Concluding that the mere statement that a DBMS can use a logical volume neither teaches nor suggests that a logical volume is a component of a database, and therefore, no suggestion or teaching to discover database components is disclosed.

*In response, the examiner respectfully disagrees that discovering a plurality of database components is not suggested by the cited reference. First, one of ordinary skill in the art at the time the invention was made would obviously know that a DBMS requires a volume of storage as a component of a database otherwise where would the data of a database be stored, and further why would there even be a need for a DBMS if there was no database.*

*Now, the mere fact that a DBMS can make use of a raw logical volume suggests that volumes can be construed to be a component of a database. Just as the mere fact that a car can make use of a tire, suggests that a tire is a component of a car.*

*Secondly, Applicant's are reminded that the only requirement for the claim is to discover a plurality of components of a database. It is obvious a volume of storage is a database component; otherwise there would be no place to store data. Since a volume can be construed to be a component of a database, and as stated in the reference, volumes are re-discovered. The reference therefore, would suggest discovering a plurality of database components.*

*Furthermore, in paragraph 0063, it states that if the snapshot is a software snap and persistent storage has been identified to convert it to a hardware snap, the application performs*

Art Unit: 2167

*a fast copy of data, such as with DataPipe and backup APIs, to accomplish the data movement, and then update the snapshot table (e.g. a database). Further stating in 0063, every time an application is invoked it re-discovers the volumes (e.g. components) on the given client. Hence, re-discovery of volumes for a database.*

*To further clarify, in 0062, it states that the application makes appropriate entries into the snapshot table (e.g. database) for the given client. That when a backup is being performed, the application identifies (e.g. discovers) the content (e.g. component), identifies the volumes involved (e.g. component), identifies the applications involved (e.g. component), engages all the writers involved, and performs or directs the snapshot and performs or directs the copying to the quick recovery volume. Then stating that the appropriate entries (components) are made into the snapshot table (database) for the given client and volumes involved.*

*Hence, the assertion directed towards a discovery of a plurality of database components is suggested by the cited reference. Therefore, the rejection is maintained for the assertion made above.*

As to applicant's assertion that the cited art does not teach or suggest selecting a data management resource...using an attribute of said component" and generating a point-in-time image of said component using said data management resource" because as earlier stated Prahlad neither teaches or suggests discovering components of a database.

*In response, please see above.*

Art Unit: 2167

As to the cited portions of Prahliid also fail to teach or suggest anything about attributes of components and using those attributes to select data management resources.

*In response, the examiner respectfully disagrees. In creating a quick recovery volume, 0037, states that it determines the capacity needed for a quick recovery volume, determining the capacity of the available volumes (e.g. characteristics of available volumes, thus attributes of said components), and selecting the volume (selecting a data management resource) based on capacity of available volumes. Therefore, attributes of components must be used to select data management resources.*

### ***Conclusion***

9. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



Art Unit: 2167

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Contact Information*

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924.

The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Pham  
Art Unit 2167  
Examiner M.P.  
11/15/06

Cam Y Truong  
Art Unit 2162  
Primary Examiner

cy

John Cottingham  
Art Unit 2167  
Supervisor

  
JOHN COTTINGHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100